ABSTRACT

A route processor computes a plurality of travel routes using map information on the basis of current-position information and destination information. A travel route is set according to VICS data and traffic-congestion prediction information obtained by statistically processing the past traffic condition based on time factors, and a vehicle is navigated on the travel route. When it is determined that there is a change in travel smoothness such as a congested traffic or a heavy traffic on the travel route, the required time for the travel route and detouring travel routes is computed, and percentage is computed so that travel routes with shorter travel time have higher chances to be selected, thereby generating weighting information. On the basis of the weighting information, one of the travel routes is notified. The required time for the respective travel routes can be substantially equalized and thus preventing the concentration of heavy traffic-congestions only on certain roads. Therefore, the navigation for a smooth travel for vehicles in a stable traffic condition can be easily provided.